NEW MEXICO HEALTH ALERT NETWORK (HAN) ADVISORY

Confirmed Case of Acute Flaccid Myelitis (AFM)

June 25, 2024

The New Mexico Department of Health (NMHealth) and the Centers for Disease Control and Prevention (CDC) have confirmed the state’s first case of acute flaccid myelitis (AFM) since 2018, in a ten-year-old resident of Dona Ana County. Clinicians should strongly consider the diagnosis of AFM in patients with acute onset of flaccid limb weakness, to ensure prompt hospitalization and referral to specialty care. Clinicians should report possible cases of AFM to the New Mexico Department of Health 24/7 Epidemiologist On-Call Hotline at 1-833-SWNURSE (1-833-796-8773) as soon as they suspect AFM. Case reporting will help states and CDC monitor AFM, identify the introduction of polio into the United States, and better understand factors associated with this illness.

AFM is a rare but serious condition associated with sudden onset of acute flaccid limb weakness (without another known cause) and lesions in the gray matter of the spinal cord identified by MRI. There can be some white matter involvement, however, gray matter involvement is what defines a case of AFM. Most cases occur in children. Some of the possible causes include non-polio enteroviruses such as EV-D68 or EV-A71, flaviviruses such as West Nile virus, herpesviruses, and adenoviruses. Poliovirus should also be considered as a possible cause in unvaccinated patients with travel to locations with circulating polio. Monitoring the occurrence of AFM is how public health watches for the introduction of polio into the United States and is a central component of the polio eradication effort.

Most patients have experienced a preceding febrile illness 1-2 weeks before the onset of flaccid limb weakness. The preceding illness is often respiratory or gastrointestinal, with symptoms of fever, rhinorrhea, cough, vomiting, or diarrhea. Onset of limb weakness is rapid, within hours to a few days, can occur in one or more limbs, and is more proximal than distal. There is a loss of muscle tone and reflexes in the affected limb(s). Cranial nerve abnormalities can also be present, including facial or eyelid droop, difficulty swallowing or speaking, or a hoarse or weak cry. Some patients also report stiff neck, headache, or pain in the affected limb(s). In severe cases, AFM can progress to
respiratory failure, requiring mechanical ventilation, or serious neurologic complications such as body temperature changes or blood pressure instability.

AFM can resemble synovitis, neuritis, limb injury, Guillain-Barre syndrome (GBS), transverse myelitis, stroke (including spinal stroke), tumor, acute cord compression, or conversion disorder. While AFM cases previously peaked from late summer to early fall in 2014, 2016, and 2018, some cases, including this one, have also been reported off-season. In addition, this seasonality was disrupted with the COVID-19 pandemic, and has not yet returned to a predictable pattern.

As of June 3, 2024, CDC has confirmed seven cases of AFM in the United States (not including the newest reported case from New Mexico), and confirmed 18 cases in 2023. There have been 751 confirmed cases since CDC began tracking AFM in August of 2014.

**Recommendations**

In response to a possible increase in cases of AFM, CDC recommends the following:

- **THINK AFM:** Clinicians should strongly consider AFM in patients with acute flaccid limb weakness, especially after respiratory illness or fever, and especially between the months of August and November.
CONSIDER POLIO: Clinicians should consider polio in patients with sudden onset of limb weakness, especially in persons who are not vaccinated or under-vaccinated for polio and have traveled to areas with recent polio activity.

HOSPITALIZE IMMEDIATELY: Patients with AFM can progress rapidly to respiratory failure. Clinicians should monitor respiratory status of patients and order MRI of the spine and brain with the highest Tesla scanner available. The clinical signs and symptoms of AFM overlap with other neurologic conditions. Therefore, it is critical to consult with specialists in neurology and infectious diseases for appropriate diagnosis and management.

LABORATORY TESTING: Clinicians should collect specimens from patients with possible AFM or polio as early as possible in the course of illness (preferably on the day of onset of limb weakness).

- The following specimens should be collected: CSF; serum; stool; and a nasopharyngeal (NP) or oropharyngeal (OP) swab

- Note, it is critical to obtain two stool samples collected at least 24 hours apart, both collected as early in illness as possible and ideally within 14 days of illness onset, as poliovirus is most likely to be detected in stool.

- Coordinate with the New Mexico Department of Health to send specimens to CDC for AFM/polio testing. Additional instructions regarding specimen collection and shipping can be found at: https://www.cdc.gov/acute-flaccid-myelitis/hcp/diagnosis-testing/specimen-collection-for-afm.html.

- Clinicians should not wait for CDC results to diagnose and manage their patient.

CASE REPORTING: Clinicians should report possible cases of AFM (acute onset of flaccid limb weakness AND MRI showing a spinal cord lesion in at least some gray matter, excluding persons with gray matter lesions in the spinal cord resulting from physician-diagnosed malignancy, vascular disease, or anatomic abnormalities) or polio to the New Mexico Department of Health using the patient summary form (https://www.cdc.gov/acute-flaccid-myelitis/downloads/patient-summary-form.pdf). Copies of the spinal cord and brain MRI reports, images, and neurology consult note(s) should be provided along with the patient summary form. Patients with gray matter lesions in the spinal cord resulting from
Physician diagnosed malignancy, vascular disease, or anatomic abnormalities do not need to be reported.

- Reports from possible cases of AFM will be submitted to CDC as part of surveillance to help track AFM, detect the introduction of polio, understand the spectrum of the disease, detect outbreaks, and inform research.

For more information

AFM

- Clinical Testing, Diagnosis, and Reporting: https://www.cdc.gov/acute-flaccid-myelitis/hcp/diagnosis-testing/index.html

POLIO

- Countries Experiencing Outbreaks of Polio: https://polioeradication.org/where-we-work/polio-outbreak-countries/
- Polio vaccine ACIP recommendation: https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/polio.html
- Resources and references for polio: https://www.cdc.gov/vaccines/vpd/polio/hcp/references-resources.html

New Mexico Health Alert Network: To register for the New Mexico Health Alert Network, click the following link to go directly to the HAN registration page https://nm.readyop.com/fs/4cjZ/10b2 Please provide all information requested to begin receiving important health alerts and advisories.